

AM-2-PM Lake Management
488 Branham Circle
Social Circle, Georgia 30025
(770) 823-3770

June 9, 2011

Mr. Jim Lanier
Aquascape Environmental
605-B Mauldin Drive
Woodstock, Georgia 30188

Dear Jim:

Fish population samples were collected from the City's impoundment on June 7, 2011 to supplement electrofishing data collected by Aquascape Environmental on April 22, 2011. Shoreline seine samples were used to collect young-of-year (Y-O-Y) fishes in order to determine spawning success of bluegill and largemouth bass. The premise of this sampling protocol is that: reproduction occurs as a response to growth and growth occurs as a result of correct predator-prey balance.

The samples revealed relatively abundant Y-O-Y bluegill, largemouth bass, and black crappie, which suggest a balanced population of bluegill and largemouth bass. Black crappie, a competitive species in small impoundment populations, was not sampled with electrofishing gear. Additional competitive species were hypothesized to be present, but were not collected with seining gear. Black crappie are capable of causing fish population structures such as the one noted in the April electrofishing sample, which included small adult bream and a paucity of adult largemouth bass.

Black crappie are cyclic in spawning and growth behaviors in small impoundments. It is common to see a strong (abundant) year class of black crappie dominate the fish population for a 3-5 year period of time. During this time small crappie (5 to 7 inches) will be common, growth will be slow, and reproduction will be sparse. Growth and reproduction of other species in the population will also be slow during this time period. Angling quality is generally inferior at this time. Eventually, at the end of the cycle, natural and fishing mortality will combine to remove enough crappie to allow renewed growth and reproduction. The seine data suggests that the population is now at the bottom of the cycle. If survival and recruitment of this year's black crappie is strong, the cycle will renew. Lake draining and chemical renovation of the fish population is the only way to remove all black crappie from the population.

A strong population of largemouth bass is a good tool for reducing recruitment of black crappie. You should prevent the harvest of any largemouth bass that is less than 16 inches, which will enable an increase of predators and potentially reduce the buildup of black crappie. The build-up of larger bass will not be immediate and may take two to three seasons to reach effective levels.

Sincerely,



Alfred C. Mauldin II
Fisheries Biologist